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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,808	11/21/2002	Alain Blanc	FR920010070	7979

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IBM MICROELECTRONICS  
INTELLECTUAL PROPERTY LAW  
1000 RIVER STREET  
972 E  
ESSEX JUNCTION, VT 05452

EXAMINER
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DING, LEIBO

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/23/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/065,808	<b>Applicant(s)</b> BLANC ET AL.	
	<b>Examiner</b> Leibo Ding	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12/14/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION*****Response to Amendment***

Applicant's amendment filed on 12/14/2006 has been entered. The amendment to specification and claims are accepted to overcome the specification objection, claim objection and the 35 USC 112 second paragraph rejection.

***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. EP01480118.7, filed on 11/23/2001.

***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 9 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 10 of copending Application No. 10/065809 in view of USPN 6721273 to Lyon et al (hereinafter "Lyon").

In claim 10 of copending application 10/065809, applicant claims all the limitation of claim 9 of current application except step b) "obtaining authorization to send a data packet corresponding to the priority rank N", and step c) "determining whether said data packet corresponding to the priority rank N is in said queue device corresponding to the priority rank N". But it is inherent for step c) to claim 9 of copending application 10/065809 that "determining whether data packet is available in the queue before transmission"; also the "method" in claim 9 of current application is considered to be similar to the "mechanism" in claim 10 of copending application 10/065809.

And Lyon teaches a method for traffic flow control in data switch, wherein a flow control message is used to control the input scheduler's activities (grant transmission or discard data) from the output (reception) buffer (Figures 1, 3 and 6; col.5, lines 22 – 27; col.6, lines 2 – 9, 32 – 37; col.7, lines 39 – 53).

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It would have been obvious to a person of ordinary skill in the art at the time the invention was made to add the function of receiving grant signal before transmission as taught by Lyon to claim 9 of copending application 10/065809 for the purpose of avoiding congestion in the communication switch and achieving better traffic flow control.

This is a provisional obviousness-type double patenting rejection.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6980513 to Novick et al (hereinafter "Novick") in view of USPN 6721273 (Lyon).

With respect to claim 9, Novick discloses a method for serving queues by a queue scheduling mechanism in a data packet transmission system, referring to Figure 1, including a transmission device (mixed traffic multiplexer 14 in Figure 1) for transmitting data packets, a set of queue devices (queues 16, 18, 20, 22, 26, 28, 30 and 32 in Figure 1) respectively associated with a set of priorities each

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defined by a priority rank for storing each of data packet transmitted by said transmission device into the queue device corresponding to one of said priority ranks, and a queue scheduler (scheduler 34 in Figure 1) for reading, at each packet cycle, a data packet in one of said queue determined by a normal priority preemption algorithm (best effort for low priority multiplexer 12). The method comprising: (a) receiving from a credit device (MCR list 36 in Figure 1, col.3, lines 36 – 37) at each packet cycle a value N (MCRR 16a, 18a, 20a and 22a in Figure 1) defining the priority rank to be considered by said queue scheduler (col.4, lines 5 – 8, steps 102 and 104 of Figure 2), the considered priority rank is selected based on a pre-determined value related to all of said priority ranks which are associated with said queue scheduling mechanism (col.4, lines 8 – 13); (c) determining whether said data packet corresponding to the priority rank N is in said queue device corresponding to the priority rank N (col.4, lines 19 – 22, “first non-empty connection queue”); and (d) when said data packet corresponding to priority rank N is in said queue device corresponding to the priority rank N, reading said data packet corresponding to priority rank N by said queue scheduler from said queue device corresponding to the priority rank N instead of said queue device determined by the normal priority preemption algorithm (col.4, lines 19 – 24, 30 – 34; steps 110 – 130 in Figure 2). Novick does not specifically disclose the reception device in the system, but it is inherent in this reference because transmitter cannot transmit data if there is no receiver.

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Novick does not disclose "obtaining authorization to send a data packet corresponding to the priority rank N".

Lyon teaches a method for traffic flow control in data switch, wherein a flow control message is used to control the input scheduler's activities (grant transmission or discard data) from the output (reception) buffer (Figures 1, 3 and 6; col.5, lines 22 – 27; col.6, lines 2 – 9, 32 – 37; col.7, lines 39 – 53).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to add the function of receiving grant signal before transmission as taught by Lyon to the method of Novick.

The motivation for doing so would have been to avoid congestion in the communication switch and achieve better traffic flow control.

With respect to claim 10, Novick does disclose that the steps are repeated iteratively until a predetermined condition is satisfied (col.4, lines 34 – 38; Figure 2, step 132 → step 114, till the service interval runs out).

With respect to claim 11, Novick does disclose that if no queue available for priority rank N, performing a step of reading a data packet by said queue scheduler from said queue device determined by the normal priority preemption

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algorithm (col.4, lines 30 – 34; wherein if CCR count reaches zero, serves best effort services).

### ***Response to Arguments***

6. Applicant's arguments with respect to claim 9 have been considered but are moot in view of the new ground(s) of rejection. Also, in view of the claim 10 of application 10/065809, claim 9 still has Non-Statutory Obviousness-type double patenting problem. See the claims rejections above for details.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



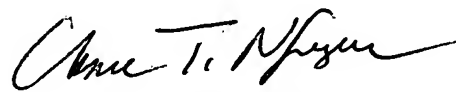
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leibo Ding whose telephone number is (571) 270-1137. The examiner can normally be reached on Monday-Friday, 7:30 a.m.-5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LD/March 5, 2007



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600